

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1. (Currently amended) ~~An overlay routing processor for transferring information~~
2 ~~over a computer network, wherein the computer network has a native routing~~
3 ~~protocol, the overlay routing processor comprising:~~
4 A method comprising performing a machine-executed operation involving
5 instructions, wherein the machine-executed operation is at least one of:
6 A) sending said instructions over transmission media;
7 B) receiving said instructions over transmission media;
8 C) storing said instructions onto a machine-readable storage medium; and
9 D) executing the instructions,
10 wherein said instructions are instructions which, when executed by one or more
11 processors, cause:
12 ~~instructions for associating computer on the computer network with a~~
13 ~~given overlay group;~~
14 receiving a signal, originating from a sender, which indicates an intention
15 of the sender to send packets to an overlay group that includes a set
16 of computers;
17 determining whether the sender has permission to send packets to the
18 overlay group;
19 if the sender has permission to send packets to the overlay group, then
20 performing the steps of:
21 ~~instructions for determining whether received information a~~
22 ~~received packet, from the sender, is associated with the~~
23 ~~given overlay group;~~
24 ~~instructions for determining, for each computer associated with the~~
25 ~~overlay group, whether to send the received packet to a~~
26 ~~particular the computer, in the set of computers, via a~~
27 ~~multicast connection or a unicast connection based, at least~~

1 2-9. (Cancelled).

1 10. (Currently amended) The ~~overlay routing processor~~ method of claim 1, further
2 ~~comprising instructions for~~ wherein said instructions, when executed by the one or
3 more processors, further cause:
4 ~~handling administrative scoping preventing a multicast packet to be blocked at a~~
5 ~~boundary point, wherein the multicast packet has a network address within~~
6 ~~a specified range of network addresses.~~

1 11. (Currently amended) The ~~overlay routing processor~~ method of claim 1, ~~further~~
2 ~~comprising instructions for~~ wherein said instructions, when executed by the one or
3 more processors, further cause:
4 in response to detecting that an amount of available bandwidth on a network is
5 below a threshold, servicing a plugin ~~modules~~ module ~~thinning~~ a packet

6 stream, wherein said received packet is part of said packet stream.

1 12. (Currently amended) The ~~overlay routing processor~~ method of claim 1, further
2 ~~comprising instructions for~~ wherein said instructions, when executed by the one or
3 more processors, further cause:
4 placing a limit on the number of transfers between computers for a given portion
5 of information packet.

1 13. (Currently amended) The overlay routing processor method of claim 12, wherein
2 information is transferred between the computers in packets, the overlay routing
3 processor further comprising instructions for wherein said instructions, when
4 executed by the one or more processors, further cause:
5 placing a “time-to-live” value in a field in a of said received packet.

1 14. (Currently amended) The ~~overlay routing processor~~ method of claim 1, further
2 comprising instructions for wherein said instructions, when executed by the one or
3 more processors, further cause:
4 preventing the transfer of information of packets between predetermined
5 computers.

1 15. (Currently amended) The overlay routing processor method of claim 14, wherein
2 said instructions, when executed by the one or more processors, further cause:
3 storing one or more addresses that each identify a computer, and
4 wherein the step of preventing the transfer of packets includes using the one or
5 more addresses to prevent the transfer of packets to any computer
6 identified by the one or more addresses.
7 ~~wherein one or more computers are identified by an address, the overlay routing~~
8 ~~processor further comprising using the address to prevent the transfer of~~
9 ~~information between predetermined computers~~

1 16-23 (Withdrawn).